

IN OUR BACKYARD

SEP 14 1993



AN UPDATE FROM THE ALBERTA SPECIAL WASTE MANAGEMENT CORPORATION Summer 1993 Vol. 4 No. 3

The Big Backyard

The latest in Alberta Special Waste Management Corporation's (ASWMC) series of special waste environmental education programs developed by FEESA: An Environmental Education Society is designed for use in grades 3 to 6. The package features a 40 x 26 inch full-color poster with class activities printed on the reverse. Teachers work with the poster, a teachers' guide and reprints of articles to help students learn that "Your backyard is bigger than you think . . .". To quote from the guide, "... your responsibilities for materials and services are much greater than the short time you make use of them . . . You use [them] at home and in your backyard, but they come from sources often far away and . . . they often end up in the ground with the potential of being released into the environment . . .".

The main themes in the guide are:

1. Where do waste, special waste and hazardous materials originate?
2. Who produces waste and special waste?
3. Where does waste and special waste go?
4. What concerns do we have about the production and management of the special waste and hazardous materials?
5. What can the individual do to help reduce waste, special waste and hazardous materials?

On consideration, perhaps even we adults need reminding of the size of our "backyard".

Kits are available from FEESA for the 1993-94 school year. Established in 1985, FEESA supports, co-ordinates and initiates environmental education throughout the province, stressing a "bias-balanced" approach in their programs - all viewpoints are examined.

Other Educational Kits

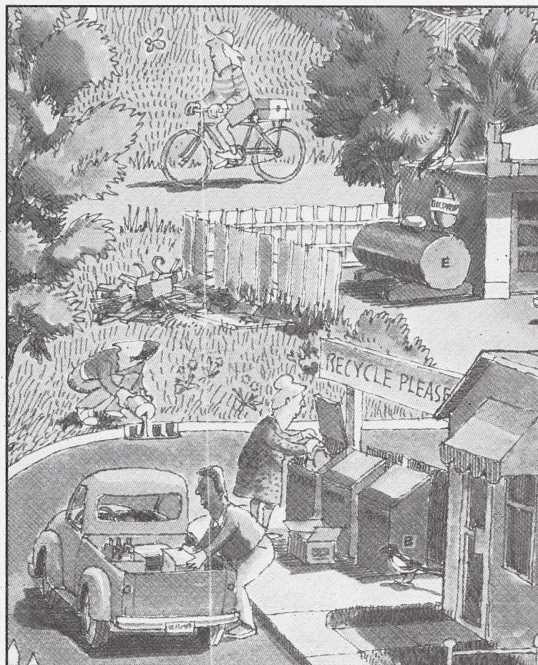
Two other ASWMC kits available from FEESA are *Waste Watchers* and *In Our Backyard*.

Waste Watchers is a booklet aimed at children from kindergarten to grade 2. The activity booklet explains what waste is and how it can be reduced or eliminated. Teachers work with an accompanying guide, and children can take the booklets home. This was the first of the educational kits planned by ASWMC and co-ordinated by FEESA.

In contrast to *Waste Watchers*, *In Our Backyard* is a resource for

secondary schools and stresses the role of the student as a responsible citizen and decision-maker. This module addresses concerns about special waste in the home, at school and in the environment, and discusses what can be done about it. The kit includes a teachers' guide, student activities and a videotape, as well as lists of resources and reference materials.

continued on next page . . .



The Big Backyard poster provides many examples of correct and incorrect ways of dealing with toxic substances.

Produced quarterly by the Alberta Special Waste Management Corporation, "In Our Backyard" is intended to keep Albertans updated on issues and solutions in hazardous waste management. You can contribute to the process by "recycling" this newsletter. Pass it on to a friend with your comments. Should you have any suggestions you wish to share, pass them on to us. Our address, phone and fax number are on page 4.



Alberta
Special Waste
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Both kits are available from FEESA. Call Jim Martin at 421-1497 for more information.

"Joy to the World!"

The days are getting shorter, it's time to head back to the classroom, and once again all Alberta school children between the ages of 6 and 12 are invited to participate in ASWMC's "Joy to the World" Christmas Card Contest.

This year's theme is "Reduce and Reuse" (2 of the 4Rs). **Deadline for entries is 4:30, Friday, October 8, 1993.** The winning entry will be made public at the end of November.

The winner will receive 50 printed Christmas cards and have his/her original artwork framed; while the sponsoring school/community organization will receive a \$100 gift certificate from a local bookstore. All entrants will receive a Corporation fridge magnet.

Contest rules

1. Artwork should be in color on paper at least 8 1/2 x 11 and no more than 18 x 24 inches. On the back of the artwork please write: student's name, address and phone number, age, grade, school and teacher's name.
2. Originality, clarity of theme and seasonal content will be important criteria in selection of the winner. The decision of the jury (a panel of professional designers and educators) will be final.
3. The winning image will become the property of ASWMC and will be used on the Corporation's 1993 Christmas card, and possibly in other printed materials.
4. Send entries to Alberta Special Waste Management Corporation, 610, 10909 Jasper Avenue, Edmonton, Alberta T5J 3L9, marked **Christmas Card Contest**. Pack carefully to prevent damage to artwork. Artwork will not be returned, and ASWMC assumes no responsibility for lost or undelivered entries.

For more information contact Judy Augustin at 1-800-272-8873 or 422-5029 (Edmonton).

Teachers going back to school

The first week in March this year saw 25 teachers from 19 Alberta communities playing student. They met in Edmonton for nine days to participate in the Waste Education Institute, one of FEESA's Fellowships in Environmental Education.

The goal of the Fellowships is to create "a leadership network of educators who will be able to tackle ... complex environmental issues in the classroom by sharing first-hand knowledge and experience".

The aim of the Waste Education Institute was to develop an awareness of waste production and management, as well as how to reduce, reuse and recycle what is produced.

More than 40 individuals directly involved in waste management spoke to the "students". In addition to presentations and workshops, participants also took part in a number of field trips, including a visit to the Clover Bar Landfill to sort garbage in a "waste audit", a tour of the Alberta Special Waste Treatment Centre near Swan Hills and a visit to St. Brendan Elementary School, Canada's first "Green School".

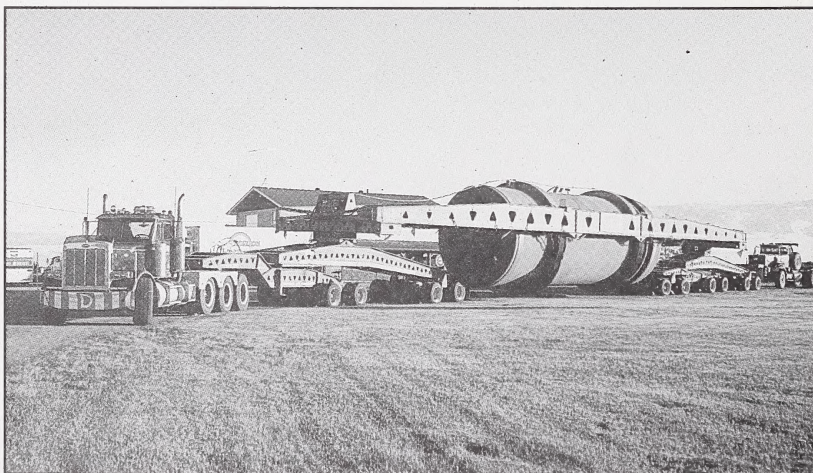
The teachers felt the program was excellent and an experience well worth the time and expense.

Several institutes on a range of environmental topics are offered each year. Despite their apparent tight focus (in the summer of 1993, for example, Water, Forestry, Atmospheric Change), the institutes are related in that a common theme runs through them - the relationship between the environment and the economy. The teacher-training institutes are developed, with input from committees consisting of representatives from industry, government and environment/community interest groups.

For information contact FEESA, 421-1497.

Expansion update

At the end of June, 1993, only 14 months had passed since approval had been given for the expansion at the Alberta Special Waste Treatment Centre. At that time, the project, which will more than triple the capacity of the facility, was 77% complete. Now that the buildings are finished, inclement weather no longer affects the progress of the project, and it is expected that by the end of September completion will be 96%.



■ **The new incinerator in transit to the Treatment Centre near Swan Hills.**

Since the beginning, the expansion site has been extraordinarily safe – work stops as visitors tour specific areas of the site, and in over 128,000 man hours there has been only one lost-time accident.

With the additions to the facility, it is estimated that approximately 40 additional people will be hired when the expansion is complete.

When the new kiln is on line, annual capacity at the facility will increase by 40,000 tonnes. The kiln will be operational by the end of November, processing non-toxic waste to test the feed systems until the end of January 1994. The initial testing is followed by the burning of low-hazard waste for an additional three months. It is anticipated that the kiln will be ready for commercial waste by July 1994.

The Treatment Centre is also adding a state-of-the-art stabilization facility. This process stabilizes and solidifies sludges and solid waste residues to allow them to be safely landfilled.

October 31, 1993 is slated as the mechanical completion date for the expansion. This will make the project both on time and on budget!

Speaking of Round Ups . . .

◆ In June 1993, the Edmonton *Household Toxic Round Up* collected 1,128 drums of materials, a gratifying increase over 1992's 994 drums. Round Ups are held throughout Alberta, with materials being recycled where possible or shipped to the Alberta Special Waste Treatment Centre for disposal.

This program is intended to encourage proper disposal of hazardous substances and to educate the public about the 4Rs and the household products they use every day. For information contact Jolie Whetzel at 1-800-272-8873 or 422-5029 (Edmonton).



The images of children used throughout the School Toxic Round Up package were taken from a child's drawings of her classmates.

◆ The 1993 *Great Drug Round Up* collected over 100 drums of old and outdated medications, which were collected at pharmacies and veterinary clinics. The sealed drums were then sent for proper disposal. A province-wide program, the Round Up is sponsored by the Alberta Pharmaceutical Association and supported by The Association of Registered Nurses, the Poison and Drug Information Centre, the Alberta Veterinary Medical Association and ASWMC.

◆ In 1992, its second year, *Oil Recovery Alberta* recovered approximately 2.2 million litres of used oil. UFA agencies throughout the province will accept uncontaminated used oil and plastic oil containers. The oil is rerefined; the containers recycled. The program provides a recycling option and, judging from the quantity collected, takes a major step toward keeping used oil out of the environment.

◆ Another program aimed at the farming sector is the *Pesticide Container Management Program*. As the name implies, it involves the collection and recycling of these containers. In 1992 nearly 786,000

containers were collected. The waste from the containers (over 19,000 litres) was sent to the Treatment Centre for disposal. In total, over 50,000 steel and 735,000 plastic containers were sent for recycling. The program is funded by the chemical industry and managed by ASWMC.

◆ In 1991, ASWMC began a one-time program, *School Toxic Round Up*, to remove excess chemicals and hazardous waste from Alberta schools. The project was developed in conjunction with Alberta Environment and Alberta Education, with funding from the Alberta Lottery Fund. By its conclusion in 1993, the program had collected 4,000 205-litre drums of waste.

Chemicals were either recycled or shipped to the Treatment Centre for disposal. An educational package consisting of a guideline booklet and fact sheets was developed and a series of workshops held throughout the province to educate school staff about hazardous waste management.

The cold facts

By August 1993, Calgary's Old Fridge Round Up roped in almost 4,000 refrigerators and more than 1,000 freezers.

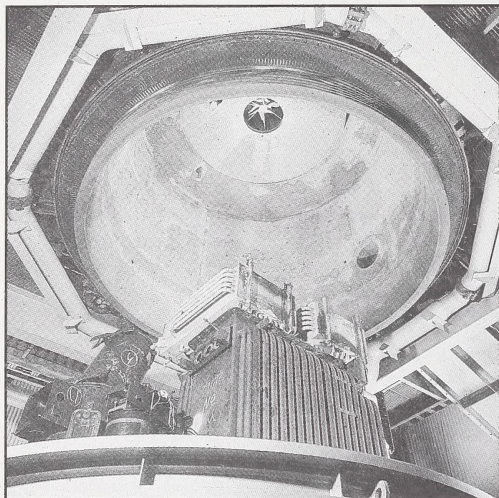
In total, Castle Appliance Service drained approximately 500 lbs of CFCs into 100-lb cylinders which were then sent out for recycling. According to Manager Ken Mogensen, the vast majority of appliances collected were 20 to 30 years old. The average refrigerator of that age contains between 12 and 16 oz of freon (CFC-12).

Capacitors and polyurethane foam insulation from the refrigerators and freezers were sent to the Alberta Special Waste Treatment Centre for disposal.

Residential refrigerators and freezers contribute to only 1-2% of the CFCs in the environment, curling irons and air conditioners 4-5%, and commercial refrigeration approximately 40-50%.

Return postage guaranteed
If undeliverable, return to:

**Alberta Special Waste
Management Corporation**
#610, 10909 Jasper Avenue
Edmonton, Alberta
T5J 3L9



The transformer furnace decontaminates metal for recycling by a local company.

Transformer furnace

An integral component of the Alberta Special Waste Treatment Centre is a new furnace which was

designed to decontaminate the metal in electrical transformers. The metal is collected by a local company in Swan Hills for recycling.

Developed in 1992 by Chem-Security (Alberta) Ltd., the transformer furnace uses controlled temperatures between 850 and 900°C. Drained transformers are indirectly heated for 10 hours until all PCBs and organic compounds are destroyed. Gaseous by-products of the heating are incinerated in a hazardous waste incinerator, where 99.9999% of all organic compounds are destroyed.

The technology used in the furnace can be added on to existing hazardous waste incinerators or adapted to meet specific requirements.

Help End Landfill Pollution

During the 1960s, as part of a sawmill operation, a wood preserving plant operated just east of Faust, Alberta. The sawmill shut down in 1973, but it was not until 1988 that the site was added to the HELP Project inventory.

Investigations carried out in 1989 and 1990 led to the discovery that the soil at the site was contaminated with wood preservatives and diesel and fuel oil. At that point Alberta Environment took interim steps to contain the contamination, with the provision that the contaminated soil be excavated and transported to the Alberta Special Waste Treatment Centre for disposal.

The project is now nearing completion, with the soil arriving at Swan Hills this fall.

Call direct

- ◆ For information on Hazardous waste management programs in Alberta
 - Toxic Round Ups
 - Community Study Groups
 - Waste Minimization**Alberta Special Waste Management Corporation**
1-800-272-8873
422-5029 (Edmonton)
428-9627 (fax)
- ◆ To report an environmental emergency or to register a complaint
Pollution Control Division/Alberta Environmental Protection
1-800-222-6514
- ◆ For information on recycling newspapers, metals, plastics, clothing
Recycling Branch/Alberta Environmental Protection
427-5838 (Edmonton)
297-5925/8255 (Calgary)
- ◆ For information on the transportation of dangerous goods
Alberta Public Safety Services
1-800-272-9600
(24 hours)
- ◆ For a directory of waste management companies in Alberta
Environmental Services Association of Alberta
439-6363 (Edmonton)
Hotline
(for small businesses)
1-800-661-WASTE (9278)
- ◆ To access the clearinghouse that puts potential users of waste materials in contact with waste producers
Alberta Waste Materials Exchange
450-5408 (Edmonton)



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